

Postoperative pain management -predictors, barriers and outcome

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This thesis is based on the following papers:

- I** Wickström K., Nordberg G. & Gaston Johansson F. (2005). Predictors and barriers to adequate treatment of postoperative pain after radical prostatectomy. *Acute pain* 7, 167-176.
- II** Wickström K., Nordberg G. & Gaston Johansson F. (2007). Intrathecal analgesia for postoperative pain relief after radical prostatectomy. *Acute Pain*, 9, 65-70.
- III** Wickström Ene K., Nordberg G., Gaston Johansson F & Sjöström B. (2006). Pain, psychological distress and health-related quality of life at baseline and 3 months after radical prostatectomy. *BMC Nursing* 5:8.
- IV** Wickström Ene K., Nordberg G., Bergh I, Gaston Johansson F & Sjöström B. (2007). Postoperative pain management - the influence of surgical ward nurses. *Journal of Clinical Nursing*. *Accepted for publication*.
- V** Wickström Ene K., Nordberg G., Sjöström B & Bergh I. (2007). Possible predictors of postoperative pain intensity. *Submitted for publication*.



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ABSTRACT

Despite the availability of clinical practice guidelines, effective analgesics and new technologies for drug administration, the management of postoperative pain continues to remain problematic and unsatisfactory. Nurses play an important role in the pain management. They assess and document pain, decide whether to administer analgesics, and they monitor the effect of medication which is prescribed and administered in a variety of ways. Continuous epidural analgesia (EDA) is a safe and effective method that is frequently used after radical prostatectomy (RP), although recent studies also have found intrathecal analgesia (ITA) to compare favourably with an EDA technique. Postoperative pain can be influenced by different factors e.g. perceived control, anxiety and depression and previous pain experience, aside from the pain treatment method. This thesis consists of five studies; the first and the second studies evaluate EDA and ITA as methods for pain treatment after RP; the third study describes pain, psychological distress and health-related quality of life (HRQOL) at baseline and three months after RP; the fourth study focuses on the ward nurses role in pain management and in the fifth study the relationship between known postoperative pain predictors and postoperative pain experience was evaluated.

Pain management after RP was not optimal with two thirds of the patients experiencing moderate/severe pain. Approximately one third of the patients' and nurses' pain reports were incongruent with nurses generally overestimating mild pain and underestimating severe pain. Documented pain scores rather than patients' pain reports determined whether or not patients were to receive opioids. Almost one third of the EDA patients experienced severe pain during one or more of three postoperative days. ITA, given before surgery, seemed to be a commendable method for pain relief. Patients who scored high on the preoperative anxiety and depression scales reported higher postoperative pain scores as well. Patients with the highest pain scores in hospital also experienced the most pain during the three months after discharge from hospital. Symptoms of anxiety and depression at three months correlated negatively with all components of HRQOL. Physical functioning had decreased, and mental health had increased at three months when compared to baseline. Age predicted a VAS >30mm, with younger patients at higher risk for postoperative pain. Preoperative symptoms of depression predicted a VAS >70mm. The only factor that predicted the next coming VAS score was the previous VAS score.

Patients have the right to be recognized as experts on their own pain experiences and to have their pain reports accurately reflected in the type of pain relief that they receive. They also have the right to expect that relief of their pain is considered to be a reasonable goal of the treatment.

Keywords: Postoperative pain management, nursing, radical prostatectomy, epidural analgesia, intrathecal analgesia, anxiety and depression, health-related quality of life, pain predictors.